

Project Title	Funding	Institution
Connections between autism, serotonin and hedgehog signaling	\$0	Medical Research Council-National Institute for Medical Research
Multigenic basis for autism linked to 22q13 chromosomal region	\$249,999	Hunter College of the City University of New York (CUNY) jointly with Research Foundation of CUNY
Motor cortex plasticity in MeCP2 duplication syndrome	\$62,500	Baylor College of Medicine
Translational dysregulation in autism pathogenesis and therapy	\$125,000	Massachusetts General Hospital
Role of GABA interneurons in a genetic model of autism	\$187,455	Yale University
Mouse Model of Dup15q Syndrome	\$670	Texas AgriLife Research
Mapping the Neurobehavioral Phenotype in Phelan McDermid Syndrome	\$35,000	ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI
GABA and Gamma-band Activity: Biomarker for ASD?	\$0	University of Pennsylvania
The role of Shank3 in neocortex versus striatum and the pathophysiology of autism	\$25,000	Duke University
Understanding the Genetic Architecture of Rett Syndrome - an Autism Spectrum Disorder	\$30,000	Cold Spring Harbor Laboratory
Neural Correlates of the Y Chromosome in Autism: XYY Syndrome as a Genetic Model	\$290,609	Children's Hospital of Philadelphia
Neural Correlates of the Y Chromosome in Autism: XYY Syndrome as a Genetic Model	\$153,479	Nemours Children's Health System, Jacksonville
Language Development in Fragile X Syndrome	\$516,736	University of California, Davis
Neuroactive Steroid GABAA Receptor Positive Modulators for Fragile X Syndrome	\$62,748	SAGE THERAPEUTICS, INC.
Genetic Modifiers of Seizure Disorders in Fragile X Syndrome	\$261,539	Emory University
A Longitudinal MRI Study of Brain Development in Fragile X Syndrome	\$548,356	University of North Carolina
Predicting Phenotypic Trajectories in Prader-Willi Syndrome	\$302,050	Vanderbilt University
Emergence and Stability of Autism in Fragile X Syndrome	\$358,000	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA
Analysis of MEF2 in Cortical Connectivity and Autism-Associated Behaviors	\$53,282	MCLEAN HOSPITAL
Phenotypic Characterization of MECP2 Mice	\$66,830	Children's Hospital of Philadelphia
Role of MEF2 and neural activity in cortical synaptic weakening and elimination	\$387,160	UT SOUTHWESTERN MEDICAL CENTER
Neurobiological Mechanism of 15q11-13 Duplication Autism Spectrum Disorder	\$376,818	BETH ISRAEL DEACONESS MEDICAL CENTER
mTOR modulation of myelination	\$179,659	Vanderbilt University
BDNF and the Restoration of Synaptic Plasticity in Fragile X and Autism	\$453,289	University of California, Irvine
Mechanisms of mGluR5 function and dysfunction in mouse autism models	\$405,319	UT SOUTHWESTERN MEDICAL CENTER
THE ROLE OF MECP2 IN RETT SYNDROME	\$353,130	University of California, Davis
Revealing protein synthesis defects in Fragile X Syndrome with new chemical tools	\$347,427	Stanford University
MeCP2 Modulation of BDNF Signaling: Shared Mechanisms of Rett and Autism	\$371,057	UNIVERSITY OF ALABAMA AT BIRMINGHAM
Phagocytosis is misregulated in a Drosophila model of Fragile X syndrome	\$27,349	Columbia University

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Studying Rett and Fragile X syndrome in human ES cells using TALEN technology	\$30,000	Whitehead Institute for Biomedical Research
A Novel Glial Specific Isoform of Cdkl5: Implications for the Pathology of Autism in Rett Syndrome	\$0	University of Nebraska
Alteration of Dendrite and Spine Number and Morphology in Human Prefrontal Cortex of Autism	\$0	University of California, Davis
Modeling Pitt-Hopkins Syndrome, an Autism Spectrum Disorder, in Transgenic Mice Harboring a Pathogenic Dominant Negative Mutation in TCF4	\$30,000	University of North Carolina
Modeling Microglial Involvement in Autism Spectrum Disorders, with Human Neuro-glial Co-cultures	\$0	Whitehead Institute for Biomedical Research
Role of Serotonin Signaling during Neural Circuitry Formation in Autism Spectrum Disorders	\$0	Massachusetts Institute of Technology
Neuropathology of the Shank3 mouse model for autism	\$1,100	University of Louisville
Physiological studies in a human stem cell model of 15q duplication syndrome	\$0	University of Connecticut
Functional and anatomical recovery of synaptic deficits in a mouse model of Angelman Syndrome	\$0	University of North Carolina
Pragmatic language and social-emotional processing in autism, fragile X, and the FMR1 premutation	\$24,898	NORTHWESTERN UNIVERSITY
Testing the ribosomal protein S6 as treatment target and biomarker in autism spectrum disorders	\$59,995	Cincinnati Children's Hospital Medical Center
TMLHE deficiency and a carnitine hypothesis for autism	\$0	Baylor College of Medicine
Bi-directional regulation of Ube3a stability by cyclic AMP-dependent kinase	\$0	University of North Carolina
A cerebellar mutant for investigating mechanisms of autism in Tuberous Sclerosis	\$149,937	Boston Children's Hospital
TrkB agonist therapy for sensorimotor dysfunction in Rett syndrome	\$147,806	Case Western Reserve University
Autism phenotypes in Tuberous Sclerosis: Risk factors, features & architecture	\$149,044	King's College London
Probing the Molecular Mechanisms Underlying Autism: Examination of Dysregulated Protein Synthesis	\$51,400	National Institutes of Health
Dissecting the 16p11.2 CNV endophenotype in induced pluripotent stem cells	\$51,400	University of California, San Francisco
Role of astrocytic glutamate transporter GLT1 in Fragile X	\$0	Tufts University
Mesocorticolimbic dopamine circuitry in mouse models of autism	\$174,944	Stanford University
Neural and cognitive discoordination in autism-related mouse models	\$277,072	New York University
Rapid screening for cortical circuit dysfunction in autism-related mouse models	\$59,835	University of California, Berkeley
Cerebellar plasticity and learning in a mouse model of autism	\$60,000	University of Chicago
Cortico-striatal dysfunction in the eIF4E transgenic mouse model of autism	\$124,496	New York University

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The Role of Glia in Fragile X Syndrome	\$60,000	Johns Hopkins University
Dysregulation of Mdm2-mediated p53 ubiquitination in autism mouse models	\$60,000	University of Illinois at Chicago
Characterizing 22q11.2 abnormalities	\$124,995	Children's Hospital of Philadelphia
16p11.2 rearrangements: Genetic paradigms for neurodevelopmental disorders	\$100,000	University of Lausanne
The role of UBE3A in autism: Is there a critical window for social development?	\$108,900	Erasmus University Medical Center
Probing the neural basis of social behavior in mice	\$62,500	Massachusetts Institute of Technology
Linking circuit dynamics and behavior in a rat model of autism	\$196,290	University of California, San Francisco
Restoring cortical plasticity in a Rett mouse model	\$0	Stanford University
MAGEL2, a candidate gene for autism and Prader-Willi syndrome	\$52,224	University of Alberta
Cortical inhibition and disrupted vocal perception in MeCP2 +/- mice	\$81,970	Cold Spring Harbor Laboratory
Neural mechanisms underlying autism behaviors in SCN1A mutant mice	\$200,000	University of Washington
Linking genetic mosaicism, neural circuit abnormalities and behavior	\$62,500	Brown University
Dendritic 'translatome' in fragile X syndrome and autism	\$60,000	University of Michigan
Genetic contribution to language-related preclinical biomarkers of autism	\$0	University of Pennsylvania
Mechanisms of synapse elimination by autism-linked genes	\$150,000	University of Texas Southwestern Medical Center
Mechanisms Underlying the Cerebellar Contribution to Autism in Mouse Models of Tu	\$190,458	CHILDREN'S HOSPITAL CORPORATION
MRI Biomarkers of Patients with Tuberous Sclerosis Complex and Autism	\$716,468	CHILDREN'S HOSPITAL CORPORATION
Imaging of protein synthesis and ubiquitination in fragile x syndrome	\$234,000	Emory University
Identification of TSC cellular phenotypes using patient-derived iPSCs	\$229,322	Rutgers University
Investigating the role of Tsc1 in neocortical circuit assembly	\$47,114	Stanford University
Neurotrophic Factor Regulation of Gene Expression	\$615,631	HARVARD MEDICAL SCHOOL
THE ROLE OF MECP2 IN RETT SYNDROME	\$100,000	University of California, Davis
Mechanisms and Rescue of Neural Circuit Dysfunction in Mecp2 Mutant Mice	\$92,578	BAYLOR COLLEGE OF MEDICINE
Role of UBE3A in the Central Nervous System	\$321,269	University of North Carolina
Tet-mediated Epigenetic Modulation in Autism	\$684,145	Emory University
Targeting the PI3K Enhancer PIKE to Reverse FXS-associated Phenotypes	\$206,000	Emory University
Presynaptic Fragile X Proteins	\$249,000	DREXEL UNIVERSITY
Genetic and Developmental Analyses of Fragile X Mental Retardation Protein	\$394,554	Vanderbilt University
A Novel Essential Gene for Human Cognitive Function	\$35,030	HARVARD MEDICAL SCHOOL
Allelic Choice in Rett Syndrome	\$390,481	WINIFRED MASTERSON BURKE MED RES INST

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Activity-dependent phosphorylation of MeCP2	\$177,055	HARVARD MEDICAL SCHOOL
Translation, Synchrony, and Cognition	\$376,430	New York University
MicroRNAs in Synaptic Plasticity and Behaviors Relevant to Autism	\$131,220	Massachusetts General Hospital
Novel candidate mechanisms of fragile X syndrome	\$248,873	UNIVERSITY OF MICHIGAN
A Family-Genetic Study of Autism and Fragile X Syndrome	\$632,570	NORTHWESTERN UNIVERSITY
Cortactin and Spine Dysfunction in Fragile X	\$33,319	University of California, Irvine
Dysregulation of Protein Synthesis in Fragile X Syndrome	\$1,060,826	National Institutes of Health
New Models For Astrocyte Function in Genetic Mouse Models of Autism Spectrum Diso	\$396,250	CLEVELAND CLINIC LERNER COM-CWRU
Translational Regulation of Adult Neural Stem Cells	\$372,621	University of Wisconsin
Dysregulation of mTOR Signaling in Fragile X Syndrome	\$487,251	ALBERT EINSTEIN COLLEGE OF MEDICINE
FMRP regulates the pruning of cell-to-cell connections in the neocortex	\$79,500	UT SOUTHWESTERN MEDICAL CENTER
Longitudinal MRI Study of Brain Development in Fragile X	\$773,954	Stanford University
Development and afferent regulation of auditory neurons	\$386,250	University of Washington
Mechanisms of Motor Skill Learning in the Fragile X Mouse Model	\$299,510	University of Nebraska
Genotype-Phenotype Relationships in Fragile X Families	\$564,704	University of California, Davis
Genotype-Phenotype Relationships in Fragile X Families	\$55,440	University of California, Davis
Profiles and Predictors of Pragmatic Language Impairments in the FMR1 Premutation	\$53,132	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA
Aberrant synaptic form and function due to TSC-mTOR-related mutation in autism spectrum disorders	\$0	Columbia University
The role of UBE3A in autism	\$125,001	Harvard Medical School
Genetically defined stem cell models of Rett and fragile X syndrome	\$175,000	Whitehead Institute for Biomedical Research
Neurobiology of RAI1, the causal gene for Smith-Magenis syndrome	\$0	Stanford University
Probing synaptic receptor composition in mouse models of autism	\$249,994	Boston Children's Hospital
Fragile X syndrome target analysis and its contribution to autism	\$249,272	Vanderbilt University

